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ABSTRACT

Policy Implications Analysis (PIA) is a tool designed to maximize the likelihood that an evaluation report will have an impact on decision-making. PIA was designed to help people planning and conducting evaluations tailor their information so that it has optimal potential for being used and acted upon. This paper describes the development and application of PIA and is organized in three parts. First, the need for formal methods to enable decisionmakers to specify more explicitly their information designed to meet this need, PIA, is described in enough detail to permit other investigators to apply the approach to their own studies. In the third section, a recently completed evaluation is used to illustrate the method's application. Several associated advantages of PIA include the following: (1) Policymakers' and other information users' expectations and preconceptions regarding the evaluation and its findings are made explicit: (2) Policy alternatives are delineated and supporting information requirements for each alternative are identified: (3) Connections between evaluation information and alternative policy actions are given additional clarity: and (4) Areas of consensus and dissensus among information users are identified. Associated disadvantages of PIA are also discussed. (Author/RL)

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POLICY IMPLICATIONS ANALYSIS: A METHODOLOGICAL ADVANCEMENT FOR POLICY RESEARCH AND EVALUATION

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POLICY IMPLICATIONS ANALYSIS: A METHODOLOGICAL ADVANCEMENT FOR POLICY RESEARCH AND EVALUATION[1]

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Introduction

Enhancing the utility of evaluations is a shared goal of policymakers and evaluators alike (Filstead, 1980; Gideonse, 1980; Pincus, 1980; Bailey, 1979; Bissell, 1979; Patton, 1978; Weiss, 1977). To alter the destiny of the typical evaluation report from gathering dust on a bookshelf to guiding administrative action requires new approaches and methodologies. Although approaches for increasing use of evaluation results for decisionmaking have been documented (Madey, 1980; Smith, 1980; Bissell, 1979; Hayman et al., 1979; Patton, 1978), few formal methods exist. The need for such methods has been expressed recently from several perspectives (Berman and Glennan, 1980; Hill, 1980; Weiler and Stearns, 1980). Filstead (1980), for example, argues that policymakers should insist that procedures be employed to gather policy-relevant data from interested or involved parties. Policy Implications Analysis (Stenner and Madey, 1976) is one such tool designed to maximize the likelihood that an evaluation report will have an impact on decisionmaking. PIA was designed to help people planning and conducting evaluations tailor their information so that it has optimal potential for being used and acted upon. This paper describes the development and application of Policy Implications Analysis (PIA).

The paper is organized in four parts. First, the need for formal methods to enable decisionmakers to specify more explicitly thier information requirements is briefly discussed. Second, one such method designed to meet this need, PIA, is described in enough detail to permit other investigators to apply the approach to their own studies. In the third section, a recently completed evaluation is used to illustrate the method's application. Associated advantages and disadvantages of the method are presented in the final section.

Need

The importance of designing evaluations so as to meet policymakers' information requirements is a current and recurring theme. Pincus (1980) describes the typical situation as follows:

> Most policymakers want their programs to succeed; but most "scientific" evaluations address effects and indicate that student outcomes as measured by test scores, dropout rates, and other such measures appear to be little affected by new government agency programs. Such reports of "no significant effect" are generally unaccompanied by useful recommendations for program improvement or policy change. Meanwhile, policymakers seek to know not only about effects, but also about what is going on in the program: how the resources are being used, whether implementation corresponds to program intent, and who is benefiting from program resource use. In effect, what can result is a "dialog of the deaf," in which neither party understands the other's premises (pp.3-4).

Hill (1980) argues that evaluation planning must begin with a careful assessment of policymakers' information needs, beginning, in the case of a federally-mandated study, with the Congress. Likewise, Berryman and Glennan (1980) argue that appropriate evaluation methods for a Federal program cannot be defined without reference to the policymaking process. Berryman and Glennan state that the policymaking process is political in that it involves real value conflicts; because no one party can impose a solution to the conflicts, policymaking becomes

a mechanism for resolving differences or a process of compromise. To be most useful, then, evaluations should address different outcomes and processes, each responding to some party's interest in the policymaking process. Berryman and Glennan add that realities often dictate that the interests of the party funding the evaluation are primary. To establish agreement about the evaluation's goals and appropriate research designs, Weiler and Stearns (1980) argue for increased collaboration among evaluators and government agencies. The goal of evaluators' work must be to provide policymakers with information which will help their deliberations.

PIA was designed to improve communication between the evaluators and policymakers by providing an active forum through which information users could express their information needs. PIA is based on the assumption that a more responsive and useful evaluation will result by understanding both the policy context within which the evaluation is commissioned and also the questions being posed by actors within that context. PIA enables the evaluation team to understand what the policy decisions are likely to be, and to identify the types of information that will be needed to make these decisions.

Description

PIA is a six-step process designed to explicate the information requirements of key information users at a variety of levels (e.g., Federal, state, local). Active participation by both evaluators and policy makers is necessary throughout the process. The PIA method proceeds as follows:

Step 1. Statements of hypothetical, but theoretically possible, findings which could result from the evaluation are generated. The findings range from being very straightforward and in line with previous studies to being relatively unexpected (in relation to previous thoery and practice). Formal or informal involvement of key information users may be sought during this first step.

Step 2. Using the generated hypothetical findings, a written exercise is prepared for later use with a carefully selected panel of respondents. The exercise is comprised of four major sections:

- an introduction to the exercise which briefly describes the PIA method and the program under scrutiny;
- hypothetical findings or "scenarios" which might appear in an executive summary of a future evaluation report with guidelines for responding to the hypothetical findings;
- an opportunity for respondents to generate findings which might result in a decision to drastically revamp or eliminate the program; and
- an evaluation of the overall exercise.

Step 3. A carefully selected panel of respondents, representing a cross-section of policymakers and other information users at a variety of levels (e.g., Federal, state, local), is identified. Both proponents and opponents of the program are included in the respondent group.

Step 4. Each member of the respondent panel is asked to complete the exercise. Respondents read the hypothetical statements and respond to each finding in terms of the following:

- how likely he/she feels that the finding will actually result from the study;
- what policy actions he/she considers feasible should the finding be sustained; and
- what further information would be needed to modify policy or take action based on the finding (i.e., what additional questions would be posed?).

Step 5. The responses of the individuals are analyzed and synthesized to:

- clarify the expectations of relevant stakeholder groups regarding the evaluation; and
- delineate the context within which the evaluation is embedded.

Step 6. The analyzed and synthesized responses are used to develop a set of policy-relevant questions or hypotheses which then guide the creation of a conceptual framework for the evaluation.

The PIA method builds upon two futures methodologies, the Delphi Technique and Scenario Writing. The Delphi Technique is a methodology for eliciting and refining ideas and gaining consensus from a panel of experts about possible future states or conditions. Typically, the procedure involves several "probes" of a panel utilizing a questionnaire, and then aggregating and feeding back the findings until group consensus is achieved. It should be noted that one of the key purposes of Delphi is not a purpose of PIA. Iterative probes are not used to reach a unified consensus from the panel of respondents; rather, the purpose is to uncover and explicate diverse expectations and information needs emanating from different perspectives on future policy and decisionmaking. However, several sequential PIA exercises may be utilized to increase the quantity and quality of design-relevant information.

Scenario Writing, a technique perfected by Herman Kahn and popularized by the book, The Year 2000, involves the generation of carefully calculated stories about the future. Scenarios have two important advantages that are relevant to the hypothetical findings generated in the PIA exercise: first, they call attention to the larger range of possibilities that must be considered; and second, they illustrate forcefully certain principles or questions which would be ignored if one insisted on taking examples only from the real--present--world. In the PIA exercise, the interest is on forecasting "findings" and generating policy "scenarios" for more than just a given time frame -- for example, one year -- in the future. In effect, the intent is to look ahead to the long-range unfolding of an evaluation process. Thus, in the PIA exercise, one must be especially alert to not being overly constrained by the routinely "plausible" and "conventional" in making hypothetical projections. Finally, in engaging in the exercise, all participants must try to experience "role moments" in the future.

Application

PIA has been used successfully by NTS Research Corporation in several longitudinal evaluations of Federal programs (e. g., Madey et al., 1980; McNeil et al., 1980). An illustration of the method's application in the recently completed evaluation of the State Capacity Building Program for the National Institute of Education, Department of Education, is presented in this section. Prior to illustrating how PIA has been used in such an evaluation, it is helpful to describe the specific program and evaluation to be used in the example. Therefore, a brief overview of the State Capacity Building Program and its evaluation is first presented.[2]

The State Capacity Building Program and Its Evaluation

Through the National Institute of Education (NIE)-sponsored State Capacity Building Program (established in 1975 and still operating), state education agencies (SEAs) are awarded one-year, renewable grants of about $ 100,000 each to support the development, and eventual institutionalization, of statewide dissemination systems for making current educational knowledge and practices accessible to administrators and practitioners. According to the NIE program announcements, such systems are to be comprised of three generic components: (1) an information resource base which contains the knowledge or knowledge-based products clients need, (2) linkages to connect the resources with the people who could benefit from them, and (3) a leadership/management component to coordinate the various activities needed so local educators could use the system for school improvement. From these generic components, states are expected to develop specific systems, customized to their own contexts, which extend or adapt existing structures for enhancing dissemination services; and as a collaborative effort between NIE and the states, timelines are established by mutual agreement.

Under the sponsorship of the Research and Educational Practice unit of NIE's Program on Dissemination and Improvement of Practice, NTS Research Corporation conducted a study of the first four years of operation of the State Capacity Building Program -- 1975-1979. The purpose of this study was not to evaluate the success of specific capacity building projects, but rather to identify factors which facilitate or impede SEA efforts to build and institutionalize statewide dissemination systems. The NTS study was intended to develop an understanding of how federal and state policy might promote capacity building for this program and for future capacity building programs. The NTS study was also intended to provide both federal and state decisionmakers with useful information for improving the current and future programs.

The evaluation was comprised of four phases: (1) a design phase (October 1976 - August 1977) devoted to describing the program, clarifying and translating the program's goals into measurable variables, and developing a design, appropriate instrumentation, and data collection and analysis procedures for the study; (2) a preparation period (September 1977 - August 1978) which included initial fieldwork in 23 project sites, some descriptive reporting, refinements in the study design, and approval of a forms clearance package; (3) the full-scale evaluation (September 1978 - April 1980) which included two waves of quantitative data collection (Fall 1978, in 33 project states; and Fall 1979, in all 50 states) and an additional wave of qualitative data collection (Winter 1980, in five project states); and (4) a dissemination phase (July 1980 - April 1981) in which the study's findings and implications were shared with policymakers, researchers, and practitioners. Figure 1 summarizes the four phases of the NTS study, highlights major data collection periods, and indicates how the NTS study fits into the overall time period of the NIE program.

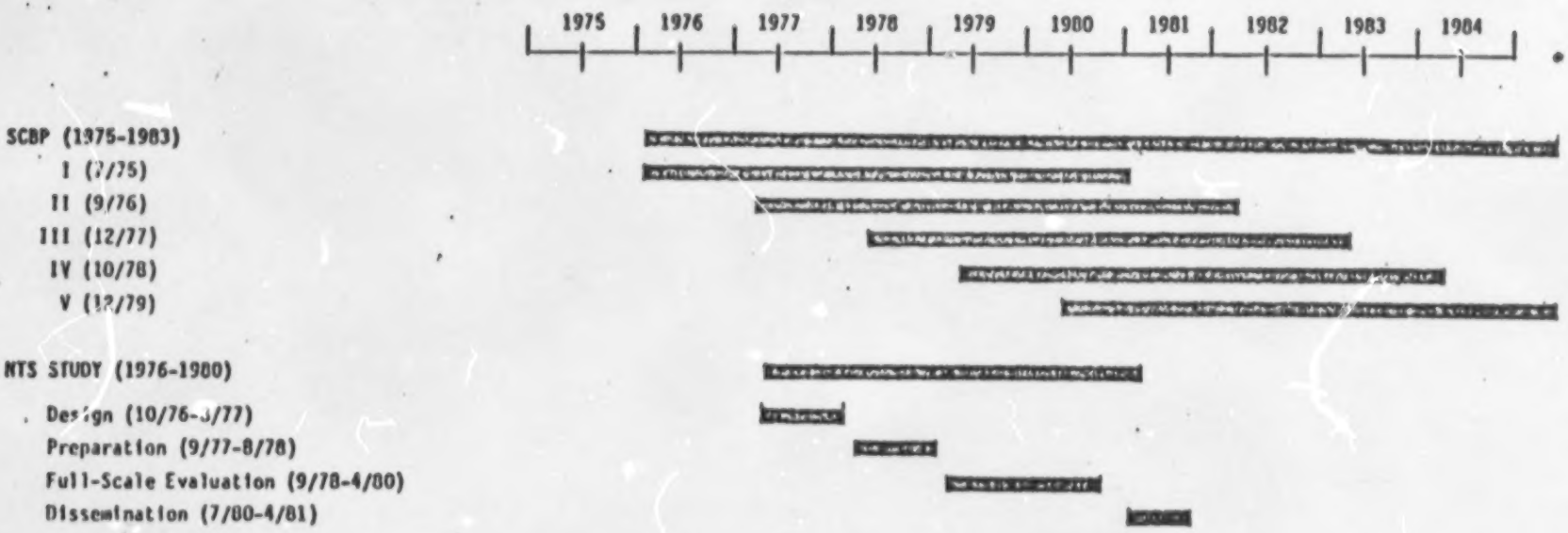

FIGURE 1. Timelines for the State Capacity Building Program (SCBP) and the NTS Study

Given a program so dynamic, NTS felt a need to obtain explicit information from the study's major audiences regarding their common and unique information needs and their expectations for the study. PIA was designed to help NTS customize the evaluation so that it had optimal potential for being used. First used in the study of the State Capacity Building Program, NTS found that PIA was eminently suited to an evaluation of this kind, where program goals were innovative, where program guidelines were non-prescriptive to accommodate wide variation among the participants, where project development was expected to be evolutionary and incremental, and where study audiences--and their respective information needs--could differ dramatically. That is, NIE program staff members, state project staff, legislators, and concerned personnel of state, regional and local education agencies each made decisions at different levels and required different information in different formats at different times (Madey, 1981).

An Illustration From a Recently Completed Evaluation

Exactly how the PIA method was used in the evaluation of The State Capacity Building Program is explained in this section on a step-by-step basis. Where appropriate, samples from the respondents' completed exercises are included. The intent is to provide sufficient information for other evaluation designers and implementors interested in customizing the exercise for use in other program evaluations.

Step 1. Statements of hypothetical, but theoretically possible, findings which could result from the evaluation were generated. The findings ranged from being very straightforward to being relatively unexpected. Informal involvement of key information users was sought.

Findings were generated for each of the three generic component areas included in the program. A total of 29 finding statements were generated, 13 for information resources, 8 for linkages, and 8 for leadership/management. The NTS project team was assisted by several state project directors, but federal program personnel were not involved in generating finding statements. (Subsequent exercises included such federal personnel, as well.) Sample findings for each program component are included in Figures 2-4.

Step 2. Using the generated hypothetical findings, a written exercise was prepared.

An annotated outline of the four-part exercise is presented in Figure 5.

Step 3. A carefully selected panel of respondents, representing a cross-section of policymakers and other information users at a variety of levels, was identified.

Respondents included federal program managers, federal project monitors, state project directors and recognized experts in the field. Respondents were selected and invited to participate in the PIA exercise.

Step 4. Each member of the respondent panel was asked to complete the exercise. Respondents read the hypothetical findings and responded to the included guidelines and probes.

All invited panel members completed the exercise. Sample responses to the three hypothetical finding statements are also included in Figures 2-4.

Step 5. The responses of the individuals were analyzed and synthesized to clarify the expectations of relevant stakeholder groups and to delineate the context within which the evaluation was embedded.

A synthesis report was prepared and the results used in finalizing the evaluation design. Perhaps, most importantly, PIA revealed that the federal program staff had a greater interest in understanding program design and management factors than had been originally thought. PIA also revealed that although evaluation information

would be useful at the state level, the primary clients were personnel at the federal level. Many state projects would be completed before the final evaluation report was published and disseminated.

Step 6. The analyzed and synthesized responses were used to develop a set of policy-relevant questions or hypotheses which then guided the creation of a conceptual framework for the evaluation.

Policy-relevant questions were developed for the overall program and major program components. The two initial design questions were as follows:

- Is capacity being built as a result of this program?
- Is the program having an effect? If so, what is the nature of the effect?

The PIA exercise provided information which enabled the NTS evaluators to refine the major study questions and final study design. Actual findings were summarized under three major research questions:

- Is dissemination capacity being built?
- What are the factors affecting the building of capacity? What factors help or hinder achievement of program objectives?
- What program management and program design factors affect the building of capacity?

Selected findings and associated policy implications from the final report (Madey et al., 1980) are excerpted in Figures 6-9. Findings for the three major program components (i.e., information resources, linkages, leadership/management) are included. In comparing the hypothetical findings presented in Figures 2-4 with the actual findings presented in Figures 6-9, it must be emphasized that almost four years passed between the time of the initial PIA exercise and generation of the final report.

Information Resources

A. Hypothetical Finding Statement

Although all states subscribe to the notion that dissemination involves two-way communication and that the information base should evolve in response to user demand, it was found that in twenty of the states the nature of the information resource base was largely determined by SEA staff with little formal or informal assessment of user needs. Project staff said that political and economic exigencies dictated the scope of the information resource base.

B. Guidelines (Circle your response)

1. To what degree is this finding within the purview of the NTS evaluation?

Definitely within — Definitely without

(1) 2 3 4 5 6 7 8 9 10

2. How much knowledge do you have of the general area addressed by this finding?

Much knowledge — Little knowledge

1 2 (3) 4 5 6 7 8 9 10

3. To what degree does this finding correspond with your expectations?

Expected — Not expected

1 2 3 4 5 (6) 7 8 9 10

4. To what degree does this finding have immediate policy implications?

To a large extent — To a limited extent

1 (2) 3 4 5 6 7 8 9 10

5. Given that this finding accurately reflects reality, is it stated in a concise fashion, i.e., does it communicate?

Communicates well — Communicates poorly

1 2 3 (4) 5 6 7 8 9 10

C. For a Finding Selected for Significant Policy Implications

1. What policy action(s) might be precipitated by this finding?

"Build needs assessment component into project."

2. What further information would you need to modify policy or take action based on this finding? (What additional questions would you pose?)

"Validity of 'political/economic constraints' pleadings."

"Recommendations on how to perform useful needs assessment."

"Recommendations on how SEAs could acquire greater credibility with teachers and LEA administrators."

D. Finally, for the Information Resources Component:

Write in the space below a "finding statement" in this component that would support a recommendation on your part to drastically revamp the State Capacity Building Program.

"Documented demand by users that they are seeking very different information from what they're getting. For example, in an SEA essentially using ERIC as its resource base, demand by teachers (say at a level of 30% or more of all teacher inquiries) that they get information on and actual samples of instructional materials (e.g., 2nd grade arithmetic series, 7th grade social studies for Chicano students)."

FIGURE 2. An Illustration of the PIA Exercise for the Information Resources Program Component

Linkages

A. Hypothetical Finding Statement

Only five of the twenty-four states employ full-time linking personnel funded through their own budget (or through budgets of intermediate units or LEAs). Full-time linking agents appear to provide better services than do those who perform a linkage function in addition to other functions. Most states use a combination of full-and part-time linkers. Part-time linkers serve more as a funnel for (pre-packaged) information packages prepared within the resources component; full-time linkers perform transformations of information and work closely with the clients.

B. Guidelines (circle your response)

1. To what degree is this finding within the purview of the NTS evaluation?

Definitely within									Definitely without
1	(2)	3	4	5	6	7	8	9	10

2. How much knowledge do you have of the general area addressed by this finding?

Much knowledge									Little knowledge
1	2	3	(4)	5	6	7	8	9	10

3. To what degree does this finding correspond with your expectations?

Expected									Not expected
1	2	(3)	4	5	6	7	8	9	10

4. To what degree does this finding have immediate policy implications?

To a large extent									To a limited extent
1	2	(3)	4	5	6	7	8	9	10

5. Given that this finding accurately reflects reality, is it stated in a concise and clear fashion, i.e., does it communicate?

Communicates well									Communicates poorly
1	2	3	4	5	(6)	7	8	9	10

C. For a Finding Selected for Significant Policy Implications

1. What policy action(s) might be precipitated by this finding?

"The policy implication is clear--hire more full-time agents--but it does <u>not</u> take account of resource constraints."

2. What further information would you need to modify policy or take action based on this finding? (What additional questions would you pose?)

"Information not specific enough to draw conclusions. Costs? In what way are the services provided 'better'? What 'better' results are obtained by working more closely with clients? Are the extra costs worth it?"

D. Finally, for the Linkage Component:

Write in the space below a "finding statement" in this component that would support a recommendation on your part to drastically revamp the State Capacity Building Program.

"Users prefer document-based information system at their immediate command and--where they have it--find it of greater utility."

"This finding would be so out of keeping with the basic premise of the Program that it (the Program) would have to be changed radically."

FIGURE 3. An Illustration of the PIA Exercise for the Linkage Program Component

Leadership/Management

A. Hypothetical Finding

In eleven of the twenty-four states, the State Capacity Building Grant accounts for less than 10 percent of the total SEA expenditures for dissemination. In these states the impact of no State Capacity Building Grant would be largely inconsequential in terms of either the large number of services available in the state or the quality of the delivery mechanisms. These same states have key leaders funded outside the grant who are well entrenched in the power structure and who appear to be developing statewide capacity largely independent of the State Capacity Building Grant.

B. Guidelines (circle your response)

1. To what degree is this finding within the purview of the NTS evaluation?

Definitely within									Definitely without
1	(2)	3	4	5	6	7	8	9	10

2. How much knowledge do you have of the general area addressed by this finding?

Much knowledge									Little knowledge
1	2	(3)	4	5	6	7	8	9	10

3. To what degree does this finding correspond with our expectations?

Expected									Not expected
1	2	3	4	5	6	(7)	8	9	10

4. To what degree does this finding have immediate policy implications?

To a large extent									To a limited extent
(1)	2	3	4	5	6	7	8	9	10

5. Given that this finding accurately reflects reality, is it stated in a concise and clear fashion, i.e, does it communicate?

Communicates well									Communicates poorly
1	(2)	3	4	5	6	7	8	9	10

C. For a Finding Selected for Significant Policy Implications

1. What policy action(s) might be precipitated by this finding?

a. "Give no awards to the 'have' states. This is probably not a politically feasible option, however."

b. "The program should be differentiated into two programs, i.e.:

(1). A capacity building grant program for states with weak to low dissemination systems already in operation; and

(2). A supplementary dissemination grants program in states with more mature, established systems to support demonstration (for other states), dissemination across states, experimentation, and evaluation."

2. What further information would you need to modify policy or take action based on this finding? (What additional questions would you pose?)

Information that would allow development of an activity appropriate to these eleven states to further their dissemination activities, since they don't need capacity building awards.

D. Finally, for the Leadership/Management Component:

Write in the space below a "finding statement" in this component that would support a recommendation on your part to drastically revamp the State Capacity Building Program.

"Data that activities run out of an Intermediate Service Agency (ISA) or decentralized information office are more successful than those centralized in and run by a State Education Agency (SEA)."

FIGURE 4. An Illustration of the PLA Exercise for the Leadership/Management Program Component

I. Introduction

A brief description of the PIA method and the program to be evaluated. (See pp.1-9 for an illustration).

II. Hypothetical Finding Statements (See Figures 2-4 for illustration).

A. "Scenarios" which might appear in the executive summary of a future evaluation report on the program

B. Guidelines for responding to each hypothetical finding or scenario:

1. To what degree is this finding within the purview of the study?

2. How much knowledge do you have of the general area addressed by this finding?

3. To what degree does this finding correspond with your expectations?

4. To what degree does this finding have immediate policy implications?

5. Given that this finding accurately reflects reality, is it stated in a concise and clear fashion, i.e., does it communicate?

C. Select findings with greatest policy implications, and determine:

1. What policy action(s) might be precipitated by this finding?

2. What further information would you need to modify policy or take action based on this finding? (What additional questions would you pose?)

III. Prepare a "Finding Statement" that would support a recommendation on your part to drastically revamp or eliminate the program. (See Figures 2-4).

IV. Critique the Overall Exercise: (See Attachment for actual critiques.)

1. What is your overall reaction to this PIA process?

2. Did it afford you a vehicle for persenting your thoughts about the evaluation and its potential contributions?

3. What modifications to Policy Implications Analysis would you suggest to improve the procedure?

FIGURE 5. An Annotated Outline of the PIA Exercise

Is Capacity Being Built?

1. The primary effect sought from the program--increased capacity of SEAs for dissemination--is being achieved.

(Information Resources) • States have substantially increased the breadth and variety of knowledge resource bases that can be accessed through the SEA dissemination unit.

(Linkages) • States have modified existing structural arrangements to develop the capacity for the delivery of information to clients through "linkers" who function as information brokers.

(Leadership/ Management) • Coordination of, and cooperation between, various program and service units in the SEA and in the state has been improved leading to a more comprehensive and generalizable body of resources available for dissemination to the education system.

(Leadership/ Management) • Most states in the SCRP evidence movement toward institutionalizing their dissemination capacity, although it is still too soon in that process to determine if the dissemination system will indeed become an accepted part of SEA program services offerings.

2. The process of increasing capacity follows several different patterns depending on state history and context, and reflects the flexibility allowed by the program guidelines.

(Information Resources) • Resource base development has expanded primarily in the areas of promising practices and other state and local information files. It appears that in most states reliance is placed upon validated programs in the school improvement process; less emphasis is placed upon information gained from non-validated, promising practices as a basis for school improvement.

(Linkages) • For the delivery of services, three linkage patterns--which we have characterized as SEA controlled (tightly coupled), SEA coordinated (loosely coupled), and external (uncoupled)--appear to reflect state philosophy and consequent structures for school improvement.

(Leadership/ Management) • Coordination has been improved primarily between the capacity building projects and generic programs such as NDN and Title IV; less coordination has been achieved between the project and content specific programs, such as vocational education and handicapped education.

(Leadership/ Management) • Building SEA dissemination system capacity seems to have an identifiable sequence of development, but individual state factors, and changes in those factors may override this "developmental" pattern.

FIGURE 6. Summary of Findings for First Major Research Question, "Is Capacity Being Built?"

Source: Madey et al., Building Capacity for the Improvement of Educational Practice: An Evaluation of NIE's State Dissemination Grants Program, Volume I: Final Evaluation Report. Report prepared for the National Institute of Education under Contract #400-76-0166. Durham, N.C.: NTS Research Corporation, 1980, pp.7.10-7.12.

Factors Affecting Program Success

Success of SEA efforts to implement and institutionalize dissemination systems appears to be influenced by the following:

State Factors

- Continuity of energetic and entrepreneurial leadership; but once that leadership is gone the process may become endangered.
- Previous involvement in dissemination activities is a helpful but not sufficient factor in institutionalization.
- Placement in an administrative unit appears to assist in the development of coordination and comprehensiveness of the system. Placement in a service unit appears to assist in the delivery of services to clients and the institutionalization of the system in the SEA.
- Initial strategies of targeting clients for service and developing products for use by particular clientele enhance the development of coordination and comprehensiveness of the system. But the project needs to move on to serve the general clientele if institutionalization is to be enhanced.
- The active support of SEA administrators (Chief State School Officers and their associates) is crucial to building capacity and implementing and institutionalizing the dissemination system.

Other Structural Factors

- The continued fragmentation of the dissemination components of Federal programs impedes the building of generalized and comprehensive dissemination systems within the states. Despite the fragmentation, however, many states have made progress in coordinating dissemination efforts at the state level.

FIGURE 7. Summary of Findings for Second Major Research Question, "What are the Factors Affecting the Building of Capacity?"

Source: Madey et al., Ibid., pp. 7.12-7.13.

Program Design and Management Factors Affecting Program Success

Success of SEA efforts to implement and institutionalize dissemination systems appears to be influenced by the following program design and management factors:

- Collaborative planning and flexibility of Program guidelines permitted states to tailor their dissemination projects to fit their individual contexts. While these approaches have enhanced the in-state capacity for independent solutions to dissemination system development, they may also foster areas of non-clarity of purpose between NIE and the states.

- Opportunities to communicate with personnel from other states and agencies facilitate project development. Although the Program provided mechanisms for such communication and for technical assistance, these provisions appear to be too limited. In other words, the plan was appropriate; its implementation was not adequate to meet the needs of the states.

- Program objectives regarding the role of the dissemination system in relation to a state's other school improvement efforts are not adequately specified in program guidelines and project proposals. The result is that the potential for facilitating the use of new knowledge and educational practices for school improvement and equal educational opportunity is only partially seen and realized in many states participating in the Program.

- Program and project goals for increasing equity and for operationalizing those goals are not well developed. There is little evidence of program resources being directed explicitly and in concerted ways for increasing equity in education.

- NIE staff resources assigned to this Program have been too limited to provide the necessary monitoring and technical assistance needed and often requested by the state projects.

FIGURE 8. Summary of Findings for Third Major Research Question, "What Program Design and Management Factors Affect the Building of Capacity?"

Source: Madey et al., Ibid., p. 7.12-7.13.

Summary of Policy Implications

The following policy implications are presented within the context of change and uncertainties at the Federal and state levels. These uncertainties are reflected in questions about expanded Federal leadership of the growth and application of dissemination systems for assisting in attaining educational improvement and education equity. At the state level, there are questions of increasing pressures on budgets for educational activities and of the willingness of states to commit themselves to continue and refine the use of dissemination systems for educational improvement and educational equity.

1. Collaboratively Strengthen Program Conceptualization and Design

   The findings of this study have broad implications for future programs, but in the near-term, NIE and the states should work together to strengthen the Program through:

   - A clearer conceptualization of, and specification of the guidelines for, ways states can use dissemination resources to facilitate significant improvements in educational practice and equity — e.g., in connection with other SEA programs or through other external linkages with practitioners.
   - A clarification of the priorities or guidelines for types of resources that should be further developed — e.g., those that are most used, most useful, most difficult to obtain through other means, or most relevant to equity issues in education.
   - The provision of needed linker training, particularly to enhance skills of individuals who are already located in positions to facilitate school improvement.

2. Strengthen Program Management and Leadership

   - NIE staff resources for this Program should be strengthened in order to provide more guidance on critical project issues — e.g., utilization of dissemination to enhance equality of educational opportunity, and trade-offs among alternative ways the states are authorized to use the Program resources.
   - Ongoing and viable communication mechanisms among the states involved in building dissemination capacity should be created and maintained. These mechanisms could include the regional exchanges who could function as the vehicle through which communication among states within regions is maintained.
   - Guidelines should acknowledge the development of organizational capacities and provide assistance for critical functions at each stage. A "step-wise" or "building block" approach is recommended that is keyed to three stages — planning, implementation and institutionalization.

3. Improve Federal Level Coordination Mechanisms

   - Mechanisms for improving coordination of (or support for the cooperation of) Federally-funded programs should be created at the Federal level.

4. Examine Further the Secondary or "Downstream" Effects of the Program In Terms of Its Effects on Education

   - This study shows that capacity is being built, and identifies a number of factors that are enhancing and limiting the capacity building effort. The Program should be examined further to determine how the capacity is used and what apsects of dissemination capacity are most critical in achieving improvements in equity and practice in education.

FIGURE 9. Summary of Policy Implications for the NTS Study of The State Capacity Building Program

Source: Madey et al., Ibid., pp. 7.13-7.22

Associated Disadvantages and Advantages

Enumerating the pros and cons of any method is a useful exercise. The potential disadvantages and advantages associated with PIA are summarized in this section. In addition, respondent critiques of the first overall exercise are presented in the attachment at the conclusion of this article. (Modifications recommended by the first respondents were incorporated into the procedures described in this article.)

Potential Disadvantages

Perhaps no technique is without potential disadvantages and PIA is no exception. Some of the difficulties surround the implementation of the technique and are presumably correctible through refinements in the process. Other problems stem from the inherently obtrusive character of the technique itself.

The technique takes time, a commodity that is often rare in the initial stages of an evaluation. If a single polling of respondents is all that is desired, then the entire process of scenario design, administration, and analysis can be accomplished in six weeks. If, however, it is important to obtain consensus on the information priorities, then several iterations may be desirable, each requiring, at a minimum, one month.

Selection of the panel can be problematical. Diversity of position and persuasion is essential but either too much diversity, or diversity at the expense of representativeness, can be self-defeating. The ideal is to adequately represent the major constituencies that will finally use the evaluation information. In some evaluations, there may be only one user group; whereas in others, such as the evaluations of Head Start and the State Capacity Building Program, the range might run from local program staff to Congress. It should be apparent that an inappropriate panel selection will hamper the generalizability, and thus, utility of panel responses.

Related to the issue of panel selection is the fact that policy contexts are dynamic and the important actors and/or information users may change with time. A partial solution to this problem is an annual polling of users accompanied by a reassessment of each user's continuing relevance. Of course, this solution is less effective in highly dynamic contexts in which the significant actors, or political climate, frequently change.

Lastly, Policy Implications Analysis is obtrusive and may reawaken dormant policy issues which are best left alone. The technique may promote frustration by encouraging participants to explore policy actions and alternatives for which adequate information does not exist (at the time) to reach an informed decision. Depending upon the policy context, the energy generated as a by-product of the technique may be viewed as desirable or undesirable.

Selected Advantages

Even with such disadvantages, PIA represents a methodological advancement for policy research and evalaution; inherent in the technique are substantial advantages:

- Policymakers' and other information users' expectations and preconceptions regarding the evaluation and its findings are made explicit.
- Policy alternatives are delineated and supporting information requirements for each alternative are identified (i.e., evaluation questions are formulated).
- The connections between evaluation information and alternative policy actions are given additional clarity.
- Areas of consensus and dissensus among information users are identified. For example, information needs of program staff and higher level policymakers are not always congruent, and thus, perceptions of the purpose and benefit of the evaluation may differ.
- Possible unintended outcomes are unmasked by involving information users who are not totally supportive of the program. Such outcomes generally go unaddressed when intentions and program design comprise the sole foundation upon which the evaluation is built.

- Boundaries for the evaluation, and information priorities within these boundaries, are made explicit.
- Results of the PIA exercise often result in deflating unrealistic expectations regarding what can be learned from an evaluation.
- A large number of respondents may be involved in the process without restrictions imposed by geography. The process is relatively low in cost, compared to the benefits derived from using such a tool.
- If desired, the entire process can be accomplished with anonymity for the participants, thus avoiding unnecessary ideological battles and policy confrontations which might better await the arrival of objective evaluation information.

Most importantly, though, PIA has already been used successfully to enhance the utility of evaluation results for decisionmakers. This formal method fills a critical need, and NTS Research Corporation's experiences with PIA suggest that it may be useful to others as well. The response to the statement "evaluations aren't useful" should no longer be tacit agreement. PIA can be used to help evaluators design and implement studies which meet policymakers' needs.

Attachment. RESPONDENT CRITIQUES OF THE FIRST PIA EXERCISE

(1) WHAT IS YOUR OVERALL REACTION TO THIS PIA PROCESS?

Federal Respondent:

- I found this to be an enlightening task. Thanks. After going through your mock findings I tried to think of what might be missing. Ideally, I think findings should be presented in 3 ways (3 kinds of policy implications):

  1. How can states better manage their projects?

  2. What new projects should NIE initiate to alleviate weaknesses?

  3. Did the State Capacity Building Program do any good?

My consistent problem was getting enough specific information from the mock findings to judge the policy relevance. Probably a weakness in this tool we must live with. Hope you continue to use the method.

Federal Respondent:

- Idea is excellent. This particular form of the idea is useful but limited. In its present form, it seems to have more to say to SEA's than to the Feds. (Will Final Report be "modularized" or will both States and Feds receive exactly the same report?)

Federal Respondent:

- I can see that it would be useful to NTS in helping decide what data to collect. But the approach concentrates on micro rather than macro questions so that bigger issues don't get surfaced.

Federal Respondent:

- I think the finding statements are probably geared well for state purposes - managing program - making shifts based on one thing or another. I have a problem with Federal implications. We're going to have (with ESEA renewal in 78) to deal with questions of coordinated Federal policy in dissemination and how to accomplish that.... are present efforts fragmented - too much of a burden for states to try to coordinate? What are the future cost options (what about means to continue activities after Federal funds cease)? We have some other options too - say if full-time personalized linkage is found to be overwhelmingly necessary and useful, we can emphasize that in programs; or if curriculum materials are 85% of the user requests, we have to revamp the assumption about information needs; or if users of service are all located within 15 miles of resource centers, we can urge decentralization.

Federal Respondent:

- Evocative, enjoyable, probably informative to NTS and NIE but too time-consuming to attain wide-ranging responses.

State Respondent:

- I found it interesting and useful. Too much time, however, which I had not counted on.

State Respondent:

- The process may be workable, but it needs some modifications.

Advisory Council Respondent:

- Excellent exercise...I really got into this experience and thought it useful for me. For what it's worth, I spent five hours in reading and thoughtfully responding to the PIA.

(2) DID IT AFFORD YOU A VEHICLE FOR PRESENTING YOUR THOUGHTS ABOUT THE EVALUATION AND ITS POTENTIAL CONTRIBUTIONS?

Federal Respondent:

- Not adequately; however, this is better than nothing, which is probably what NTS would have got from me without this exercise.

State Respondent:

- Yes, almost completely.

Advisory Council:

- Yes, hypothetical (?!) findings showed me really great insight into (my) issues in the SEA dissemination system.

(3) WHAT MODIFICATIONS TO POLICY IMPLICATIONS ANALYSIS WOULD YOU SUGGEST TO IMPROVE THE PROCEDURE?

Federal Respondent:

- For the most part, the questions address management alterations in the program. This is like generals fighting the last war - by the time the results are in, most of the initiating awards will have been made. Of most interest to me is how we can build in continuation after the Federal bucks cease to flow and what we can learn to apply to other dissemination efforts.

- Talk to NIE staff before developing findings.

- Have a brief description of the program in introduction. Hard for a reader unfamiliar with project to know what's being discussed.

- Use conference techniques for getting at applications; policy shifts, additional information required.

State Respondent:

- I'm afraid I reacted sometimes as the project director in one state and sometime in light of the overall impact in all capacity building states. I'm not sure whether it would be significant to pull out these differences. I also reacted poorly to the final statement in each section about "drastically revamping." Isn't evaluation info useful if it only results in modest modifications? Surely everything we're doing isn't wrong!

- Needs to be shortened. The time required to respond is grudgingly given.

- A rating scale with 10 choices violates what I have been taught about item construction. What will you conclude from an item with an average rating of 3 or 8? Five choices would have been more than adequate.

- I don't understand the purpose of guidelines #1 and #5. They should be dichotomous choices in my opinion.

Advisory Council:

- Reduce the number of gradations on multiple choice (couldn't differentiate between 8 and 7, etc.)

- Eliminate the request (at least for Advisory Council types) to have to suggest a new finding. I found it very difficult.

NOTES

1. Paper presented at the 4th Annual Meeting of the Evaluation Research Society, Washington, D.C., November 19-21, 1980. The NTS evaluation of the State Capacity Building Program is supported with federal funds from the National Institute of Education, Department of Education; however, the contents of this article do not necessarily reflect the views or policies of the National Institute of Education, or the Department of Education. Copies of the paper may be obtained by writing the authors at the following address: NTS Research Corporation, 2634 Chapel Hill Boulevard, Durham, N.C. 27707.

2. For a more extensive description of the NIE-sponsored State Capacity Building Program and its evaluation, readers are referred to the five volumes prepared by NTS Research Corporation which comprise the final report. The complete set of volumes, each of which has the same general title, Building Capacity for the Improvement of Educational Practice, is as follows:

Volume I: An Evaluation of NIE's State Dissemination Grants Program: Final Evaluation Report (December 1980)

Volume II: 1979 State Abstracts: State Dissemination Efforts (October 1980)

Volume III: A Study of Linker Agent Activities and Roles (October 1980)

Volume IV: A Study of The Development of Scales Measuring Dissemination Capacity (December 1980)

Volume V: An Evaluation of NIE's State Dissemination Grants Program: Executive Summary (December 1980)

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